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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MCNEES WALLACE & NURICK LLC
100 PINE STREET
P.O. BOX 1166
HARRISBURG, PA 17108-1166

EXAMINER	
JOLLEY, KIRSTEN	

ART UNIT	PAPER NUMBER
1762	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/663,320	BUCZEK ET AL.	
	Examiner	Art Unit	
	Kirsten C. Jolley	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 July 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-19,21-23,25-36,38 and 39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-19,21-23,25-36,38 and 39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. The objection to the specification, claim objections, and 35 USC 112, 2nd paragraph rejections made in the prior Office action have been withdrawn in response to Applicant's amendments.

2. The 35 USC 103(a) rejections over Baldi in view of Masumoto et al. have been withdrawn in response to Applicant's claim amendments requiring that the particles are physically separated from one another such that the medium/matrix remains electrically non-conductive. It is noted, however, that this limitation appears to be new matter as discussed below. If Applicant deletes this limitation from the claims, then the rejections over Baldi in view of Masumoto et al. will be re-instated.

3. Applicant's arguments filed July 11, 2005 have been fully considered but they are not persuasive.

With respect to the Phillips et al. reference, Applicant argues that Phillips does not teach the use of an article surface having a complex, three-dimensional, non-planar shape, and Phillips is specifically directed to the use of sheets which are planar. The Examiner disagrees. Phillips et al. states that small portions of its polymeric film can be incorporated into labels or packaging of articles which may be subject to counterfeiting (col. 9, lines 45-49). The Examiner notes that it is well known that many types of packaging have a complex, three-dimensional, non-planar, such as curved, shape. For example, plastic packaging for valuable electrical components or other various non-planar objects/articles are often subject to counterfeiting or tampering. It

would have been obvious for one having ordinary skill in the art reading the reference of Phillips et al. to have applied its security film coating on packaging for electrical products or other valuable objects with the expectation of successful results since Phillips et al. clearly suggests use of its polymeric film on packaging of articles, and because there are a wide array of counterfeited articles that are non-planar.

With respect to the rejections over Masumoto et al., Applicant argues that Masumoto et al. does not teach the use of an article surface having a complex, three-dimensional, non-planar shape, and Masumoto lacks any teaching on how the powder can be used to coat complex, three-dimensional, non-planar shapes. The Examiner notes that Masumoto et al. teaches that its coating materials are generally used in the field where corrosion resistance and weathering resistance are required. The Examiner notes that it is well known to apply coatings to three-dimensional, non-planar, curved articles for the purpose of providing corrosion and weathering resistance, and there is nothing in Masumoto et al. that requires coating on a flat surface. It would have been well within the skill of an ordinary artisan to have applied the coatings of Masumoto et al. to three-dimensional curved articles with the expectation of successful results.

Applicant further argues that Masumoto et al. neither teaches nor suggests the ultimate result of the particles being physically separated from one another such that the medium remains electrically non-conductive, and Masumoto et al. teaches away from such a result. The Examiner acknowledges that Masumoto et al.'s invention in general teaches away from producing coatings that are electrically non-conductive. However, in one comparative example (Experiment 6, illustrated in Table 9), an electrically non-conductive film is formed using "leafy" copper particles in a non-conductive coating medium, as discussed in more detail below.

Specification

4. The amendment filed July 11, 2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: In newly-added paragraphs [0012.1], [0012.2], and [0012.3], the disclosures stating that the particles are disposed in an electrically non-conductive medium/matrix, and that the particles are physically separated from one another such that the medium/matrix remains electrically non-conductive, are new matter. These disclosures did not appear in the specification as originally filed.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 17-19, 21-23, 25-36, and 38-39 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 17, 26, and 32, the newly-added limitations "disposing ... particles in a ... electrically non-conductive medium [or matrix]" and "the

particles being physically separated from one another such that the medium [or matrix] remains electrically non-conductive" appear to be new matter. The Examiner could not locate disclosure in the specification that the medium/matrix is electrically non-conductive or that the particles are physically separated from one another such that the medium/matrix remains non-conductive.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 17, 26, 30, 32, 36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips et al. (US 5,424,119).

Phillips et al. discloses a method of disposing a plurality of non-spherical particles in a fluid medium, each particle including a major dimension, and casting the medium having particles onto the surface of an article, whereby the medium is maintained in the fluid condition for a time selected to enable the surface tension and gravitational forces to locate at least about 50% (or 60%) of the plurality of particles in a position generally along the article surface (col. 6, lines 11-36). The figures illustrates that at least about 50-60% of the plurality of particles are oriented parallel to the surface on which they are cast. It is noted that Phillips et al. states that small portions of its polymeric film can be incorporated into labels or packaging of articles which may be subject to counterfeiting (col. 9, lines 45-49). The Examiner notes that it is well known that many types of packaging have a complex, three-dimensional, non-planar, such as

curved, shape. For example, plastic packaging for valuable electrical components or other various non-planar objects/articles are often subject to counterfeiting or tampering. It would have been obvious for one having ordinary skill in the art reading the reference of Phillips et al. to have incorporated applied its security film coating material on packaging for electrical products or other valuable objects with the expectation of successful results since Phillips et al. clearly suggests use of its polymeric film on packaging of articles, and because there are a wide array of articles that are non-planar.

9. Claims 17-19, 21-23, 26, 28, 30-32, 36, and 38 are rejected under 35 U.S.C. 103(a) as obvious over Masumoto et al. (US 4,891,068).

Masumoto et al. discloses in Experiment 6 (Table 9) disposing ground leafy copper electrolytic powder in a fluid non-metallic and electrically non-conductive medium/matrix having a viscosity that can be increased on a surface of an article. It is known that "leafy" particles have a major dimension and minor dimension. The surface tension of the medium/matrix is maintained in a fluid condition for a time to enable the surface tension to locate at least about 50% of the plurality of particles in a position generally along the article surface. It is known that the particles are physically separated from one another such that the medium/matrix remains electrically non-conductive because Table 9 in col. 20 indicates that the electrical resistance of the coating containing leafy copper powder is infinity, and because Masumoto et al. teaches in col. 3, lines 9-14 (when discussing use of conductive fillers such as copper) that conventionally a number of gaps are formed between fillers in the coatings such that no sufficient electromagnetic shielding effect is obtained. While use of leafy copper powder is in

a Comparative example, and not an example or desired outcome of Masumoto et al.'s invention, the reference none-the-less discloses use of leafy fillers (which would be oriented similar to the leaf-shaped fillers of Masumoto et al.'s invention) which are physically separated from each other in the product such that the copper-containing coating remains non-conductive.

While Masumoto et al. does not disclose the percentage of particles positioned in a position parallel to the article surface in its comparative examples, it is the Examiner's position that greater than 50% (or 60%) would necessarily be positioned in such a direction because the coatings of the invention and the comparative examples are processed in a similar manner and therefore would be exposed to the same effects of surface tension. Further, Masumoto et al. generally teaches that *all* of the particles of the invention lay in a parallel manner to form a continuous film of powder.

Masumoto et al. lacks a teaching of applying its coating to an article surface having a complex, three-dimensional, non-planar shape. However, it is noted that Masumoto et al. teaches that its coating materials are generally used in the field where corrosion resistance and weathering resistance are required. The Examiner notes that it is well known to apply coatings to three-dimensional, non-planar, curved articles for the purpose of providing corrosion and weathering resistance, and there is nothing in Masumoto et al. that requires coating on a flat surface. It would have been well within the skill of an ordinary artisan to have applied the coatings of Masumoto et al. to three-dimensional curved articles with the expectation of successful results.

With respect to claims 18, 28, and 34, Masumoto et al. teaches that the coatings applied in Experiment 6 are applied by brushing (col. 18). The Examiner notes that when applying

coatings by brushing, multiple brush strokes (forwards and backwards, for example) are generally applied to provide a thick enough or even coating. Such multiple brush strokes broadly read on applying a plurality of superimposed layers of the same coating material. As to claims 19 and 22, Masumoto et al. discloses applying its coating to a thickness of 100 um, or 0.004 inches. While this thickness does not fall within Applicant's claimed range, it is not far from Applicant's range, and is merely exemplary and not limiting. It would have been obvious for one having ordinary skill in the art to have determined the optimum thickness through routine experimentation depending upon the end use of the product.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C. Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Tuesday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kirsten C Jolley
Primary Examiner
Art Unit 1762

kcj